

Attorney Docket No. BU9-99-067  
(21806-00070-US1)

Application No. 10/672,012

**IN THE CLAIMS**

This listing of claims will replace all previous versions and listings of claims in the application:

**LISTING OF CLAIMS**

1-19 (Cancelled).

20. (Previously presented) A method for making a semiconductor chip comprising:  
forming a diffusion region in a semiconductor substrate;  
forming an insulated trench structure in said substrate which surrounds said diffusion region; and  
forming electrical connections on said trench structure and said substrate which receive a control voltage whereby an electric field is produced to control a current flowing in said diffusion region.

21. (Previously presented) The method for making a semiconductor chip according to claim 20, further comprising source and drain regions formed in said diffusion on each side of a gate.

22. (Original) The method of making a semiconductor chip according to claim 20, wherein said diffusion region forms a resistor which has a resistance controlled in response to said control voltage.

23. (Previously presented) The method of making a semiconductor chip according to claim 20, wherein said diffusion region is formed in a well of polysilicon deposited in said trench structure.

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24. (Original) A method for making a semiconductor chip comprising:  
forming first and second diffusion regions in a semiconductor substrate;  
forming a trench structure around said first and second diffusion regions; and  
forming a contact on said trench structure and said substrate for controlling  
current through said diffusion regions.

25. (Original) The method for making a semiconductor chip according to claim  
24, further comprising:  
forming first and second gates over said first and second diffusion regions.

26. (Previously presented) A method for making a semiconductor chip  
comprising:  
forming multiple diffusion regions that are surrounded by multiple trench  
structures on a substrate; and  
forming multiple contacts on each of said trench structures and said substrate  
for controlling current through said diffusion regions.

27. (Original) The method for making a semiconductor chip according to claim  
26, further comprising:  
forming a gate electrode over each of said diffusion regions; and  
forming drain and source connections on opposite sides of said gate  
electrodes.